High Thermal Conductive Halogen-free Phosphorus-free Retardant Resin Composition for Printed Circuit Board Materials

ABSTRACT OF THE DISCLOSURE

A high thermal conductive halogen-free phosphorus-free retardant resin composition for printed circuit board materials is composed of (1) an epoxy resin having bifunctional or polyfunctional groups, in an amount of 10 to 50% by weight based on the total composition; (2) a retardant, having amide, imide and hydroxy functional groups, in an amount of 10 to 30% by weight based on the total composition; (3) an inorganic salts, in an amount of 10 to 50% by weight based on the total composition; and (4) a high thermal conductive metal powder, in an amount of 10 to 30% by weight based on the total composition. The present invention is free from phosphorus-containing retardant, and hence does not pollute the environment due to hydrolysis and further exhibits a characteristic of high thermal conductive that makes the operation of the electronic devices more stable.